

According to the present invention, the dimensional proportions of the various panels described are chosen so as to form a self-trimming shield which harmonizes with the appearance of the door trim. It is also clear that the tendency of the shield to invert during cycling can be profoundly affected by the dimensional proportions of the panels. For example, if panel 26 of FIGS. 1 and 2 and panel 76 of FIGS. 3 and 4 are sufficiently wide, inversion of the shield is impossible without destructively deforming the panel. By incorporation of the biasing member, it is possible to satisfy the anti-inversion requirement while still maintaining the harmony of appearance which is esthetically important in most cases. The shield may be fabricated from combinations of rigid and flexible members or from flexurally similar components made from an appropriate semi-rigid polymeric material or other resilient material.

Attachment of end panels 25, 30, 75, and 78 may be by adhesive bonding, thermal bonding, mechanical fasteners, or other appropriate commonly known joining process.

In summary, the shield of the present invention provides a self-trimming device 14, or 64, which stows neatly against the door 11, as shown in FIGS. 1, 3, and 5a. This is accomplished using a plurality of relatively stiff panels. End panels 25, 30, 75, and 78 being fastened to door 11 and door casing 12 while inner panels 26, 27, 28, 29, 76, and 77, as they may apply, are articulably connected to the end panels and/or each other at joints 35, 36, 37, 52, 50, or 85, as appropriate. Anti-inversion bias may be provided by making joints 50 and 52 or joint member 86 with sufficient elastic stiffness to resist entry of panels 26, 27, 28, or 76, as the case may be, into the pinch point defined by the gap between door heel 15 and casing jamb 16. An alternative biasing member 90 is provided either as a separable item, as illustrated in FIGS. 5a and 5b, or as an integrally formed part of the shield panel as described above. When the door is opened, as seen in FIGS. 2, 4, and 5b, the shield 14 or 64 unfolds to cover the pinch point. In its separable embodiment, biasing member 90 may have only a short vertical extent when used with a shield having sufficient stiffness. The biasing member, in whichever embodi-

ment employed, urges inner panels 26, 27, and 76 away from the pinch point to prevent inversion of the shield.

If desired, the shield may be provided with an attachment concealing feature (not illustrated) by merely changing the direction of panel 25 or 75, as applicable, during fabrication of the shield. This locates the fasteners or other attachment means under the panels 26 and 27 or 76 when the door is closed.

The foregoing invention has been illustrated and described in accordance with a preferred embodiment. It is recognized that other variations and changes may be made therein without departing from the invention as set forth in the claims.

Having described the invention, what is claimed is:

1. A self-trimming shield for the gap between a hinged door heel and its casing, comprising:

a unitary strip of length substantially equal to the height of said door and comprising a sequentially arrayed plurality of elongated parallel end panels and inner panels; opposite end panels of which plurality being attached, respectively, to the door and casing on the side opposite the hinge; and inner panels of said plurality being articulably connected with said end panels and with each other in such manner that, when the door is closed, said panels automatically fold to lie in close proximity to the door.

2. The self-trimming shield of claim 1, wherein said unitary strip comprises at least five panels.

3. The self-trimming shield of claim 2, wherein said panels have sizes and configurations which prevent inversion of said shield when the door is fully cycled between its opened and closed positions.

4. The self-trimming shield of claim 1, further comprising:

means, on at least one of said plurality of panels, for biasing said inner panels away from the door heel when the door is being opened and closed.

5. The self-trimming shield of claim 1, wherein one or more of said plurality of panels are configured in such a way that said shield appears to be part of the door trim when the door is closed.

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